



ACADEMY

NEWSLETTER OF THE CALIFORNIA ACADEMY OF SCIENCES

HOME OF
STEINHART
AQUARIUM,
MORRISON
PLANETARIUM,
NATURAL
HISTORY
MUSEUM

SHARKS

New Tropical Shark Exhibit — Opening mid-July



Tropical sharks are invading the Steinhart Aquarium! Nearly 15 sleek, beautiful reef sharks such as black tips, white tips, wobbegongs, nurse sharks and colorful tropical fishes will greet visitors in the newly renovated 65,000-gallon exhibit. This impressive display is transforming the area where our two dolphins, Amphi and Thetis, once resided into a spectacular tropical habitat typifying a Pacific coral reef.

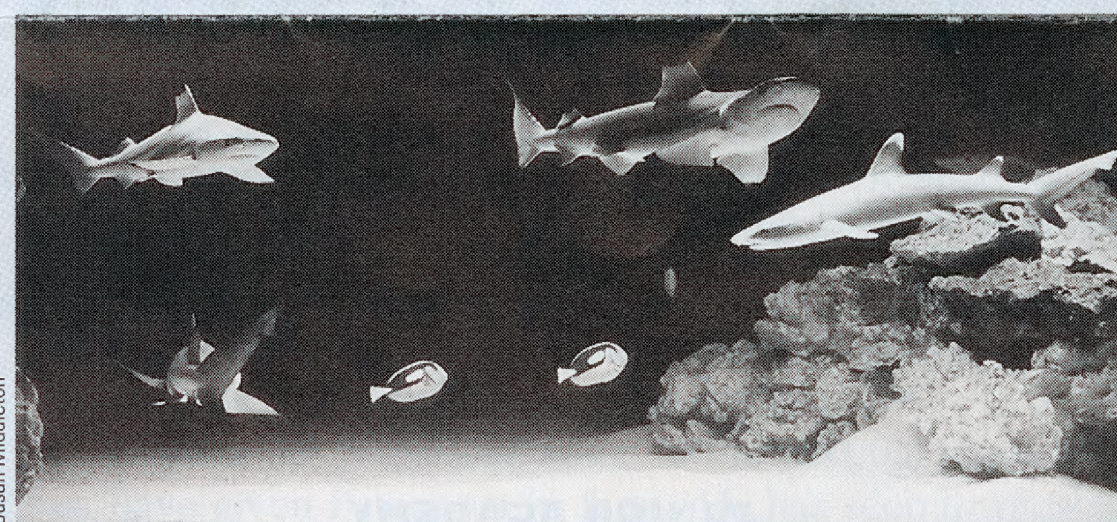
From the observation area, you'll view all the wonders of coral reef life as the three- to five-foot-long sharks glide through the 46-by-21 foot aquarium. These sharks and other colorful coral reef fishes, tarpon and permit, represent several of the dominant species of the reef life system. Visitors will be in awe as they encounter these animals eye to eye and gain a fish's view of these sharks.

Sharks are at once both feared and revered for their strength and power as predatory hunters of the deep. Throughout the world, sharks are becoming increasingly threatened due to over fishing and illegal harvesting. By encountering these animals and witnessing them first-hand in this dramatic new aquarium exhibit, the Academy of Sciences hopes that visitors will come away with a renewed respect for both



the beauty of sharks and the important role that they hold in the ocean ecosystem.

Amphi and Thetis were successfully relocated to a 2-million gallon cetacean habitat at Sea World of Texas in San Antonio last fall and are doing better than we could have ever hoped. They are fully integrated into a breeding colony of 10 white-sided dolphins. The three aquarium's harbor seals, Reno, Missy and Geraldine, have moved off display, but may return at a later date.



Susan Middleton

To accommodate the new shark exhibit, this tank is being retrofitted with new life support systems, including a heat exchanger, new water pumps and upgraded plumbing. The new tropical shark tank is scheduled to open in mid-July. Please call the information hotline at 750-7145 for updated information.

ARTIST-IN-RESIDENCE

Cultural Programs Abound — New Artist-In-Residence Program

Beginning in July, the Traditional Arts program is launching a new, pilot project featuring craft artists in Cowell Hall on the last Wednesday of every month from 10 a.m. to 4 p.m. Artists will provide a comprehensive presentation of their art form through demonstrations and discussion throughout the day. Look for upcoming artists in the Academy Newsletter!



Yup'ik Eskimo Bear Symbolism

In conjunction with the exhibit "Bears: Imagination and Reality," Chuna McIntyre will demonstrate the art of making ceremonial dance fans and talk about bear lore of the Central Alaskan Yup'ik people.

Wed., July 31
10 a.m. to 4 p.m. (Cowell Hall)

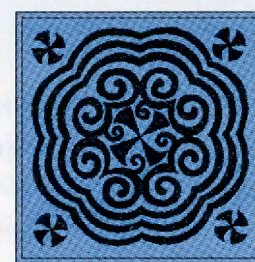
Hmong Textiles: From Laos to America

After the fall of Saigon in 1975, several Hmong refugees from the hills of Laos emigrated to the United States to begin a new life. Referred to as the "embroidery people," the Hmong have a strong cultural identity with their textile heritage. Youa Moua and Pa Yang demonstrate the techniques of *paj ntaub*, or flower cloth, and discuss the adaptation of their art form in America.

In conjunction with the embroidery demonstrations, anthropology staff member June Anderson presents a one-hour, slide-illustrated lec-

ture on the changes in the story-cloths and other textiles of the Hmong since they settled in California. Anderson's talk is based on the field-work she conducted in the local Hmong communities for her recent book, *Mayko's Story: A Hmong Textile Artist in California*, published by the Academy of Sciences. A book-signing will follow the lecture.

Wed., Aug. 28
Demonstration — 10 a.m. to 4 p.m. (Cowell Hall);
Lecture — 1 p.m. (Auditorium)



Learn From the Experts

School is in at the California Academy of Sciences! Education courses run throughout the summer, offering many opportunities to study fascinating topics. Summer classes also include many exciting "study tours," with guided, educational trips to many local and regional destinations.

Get started with this \$10 coupon, our gift to you for supporting the Academy of Sciences. It can be applied to any Junior Academy or Adult and Family Education course fees through January 1997. We hope you can join us!

\$10

Can be applied to Junior Academy, Family Education, Adult Education Class. Good through January 1997. Limit one coupon per household.



Adult and Family Education participants enjoy learning from Greg de Nevers, the resident expert at Pepperwood Nature Preserve.

ADULT EDUCATION

East of the Sierran Crest: The White Mountains and Great Basin

Contemplate life at 10,000 feet! Explore the ancient bristlecone pines and flowers of eastern California. Bring your camera, sketchbook and journal to document your trip into the world of alpine ecology and the natural history of the great basin. A car caravan through Mono Lake and the Long Valley Caldera Basin will converge at the University of California's Crooked Creek Research Station. With instructors Steve Cochrane and Lisa Frost, you'll explore the high mountain meadows, and discover how plants and animals survive at this high altitude. Lodging in a historic pine lodge with shared rooms and baths is included.

Pre-trip meeting, July 15, 7:30-8:30 p.m.; trip July 25-28
Cost: \$325 members/\$375 nonmembers (Includes lodging and food. Participant provides transportation and bedding.)

For more information on this class and others, contact the adult and family education program at 750-7100.

JUNIOR ACADEMY

Bears, Bears and Shadow Bears

Our super summer bear exhibit will be the backdrop for us to explore the life of bears from all over the world. We'll create shadow puppets and write a play for presentation in the exhibit. A field trip will be included. July 9 to 25, (Tue. and Thur.), 1:30 p.m. to 3 p.m.; 6-8 years; \$40.

Science Under the Sea

We'll examine the physical properties of the ocean, such as temperature, pH, salinity, clarity and depth, before we explore the algae, intertidal animals and ocean organisms that the ocean supports. By dissecting a fish, you'll learn all about their anatomy and feeding strategies. Aug. 16, 9 a.m. to noon; or Aug. 19, 1 p.m. to 4 p.m.; 9-16 years; \$25.

Working With Wildlife

Step inside the world of biologists and naturalists as you join a scientific study site and participate in ongoing nighttime field research at the Academy's Pepperwood Nature Preserve. Catch a glimpse of the secret lives of wild animals including snakes, birds, raccoons and bats. July 27-28, overnight; 13-16 years; \$60.

The Junior Academy offers a wide variety of programs for kids 6-16. For current availability of these and other classes, please call 750-7100.

ACADEMY STORE

"Bearied" Treasures in the Academy Store

After shopping for your favorite "bearied treasure" at the Academy Store's Bear Den located in the "Bears: Imagination and Reality" exhibit, you can enjoy these following activities and demonstrations:

Children can stuff their very own teddy bear to take home. Stuff-A-Bear kits are available at the Academy Store for \$7.95. Volunteers will help kids assemble their bear.

Sat./Sun., July 6-7 and Sat./Sun., Aug. 17-18, 11 a.m. to 3 p.m. (Children's Store)



Marge Samilson, photographer and Note-ables greeting card designer will be available to discuss her bear photographs and cards.

Sat., July 20 — noon to 3 p.m. (Academy Store)

Debra Bedwell-Koontz from D'Bears, designer of one-of-a-kind collectible teddy bears, will discuss her life passion of designing bears and her secrets that make her bears the "best collectibles" ever.

Sat., Aug. 24-25, noon to 3 p.m. (Academy Store)

Vietnamese Traditional Music

The Tieng Vong Que Hu'o'ng (Echo From Motherland) ensemble led by Ngoc Dung, a former music professor in Vietnam, perform music on the *dan tranh* (zither); *dan bau* (monochord); *dan nguyet* (moon-shaped lute) and the *bo trong le* (drums).

Sat., July 13 — 1 p.m. (Auditorium)



Flamenco Dance

Los Flamencos de la Bahia, featuring dancers Monica Bermudez and Roberto Zamora, present traditional Flamenco dance and music from the Andalusian region of Southern Spain.

Sat., July 20 — 1 p.m. (Auditorium)

Russian Costumes: Robes of an Empire

Ballet Russe, one of North America's premier Russian dance ensembles, presents a lively narrated program of exquisite costumes representative of the countryside and court of Russia.

Sat., Aug. 3 — 1 p.m. (Auditorium)

SPECIAL CON ACADEMY C

As part of an effort to continually expanded programming, the Academy cultural performances as part of these dynamic performances are held in the auditorium. Pres association with the Calif

Women

Choreographer/Artistic Director Br San Francisco present an illustrated the creative process and artistic vis toire that spans 25 years of dance r ODC's "Western Women Trilogy," plores the history and roles of w during three historic periods.

Fri., Aug. 9 — noon to 1 p.m.

African-Am

Linda Tillery and the Cultural Her forms of African-American music to ture, the CHC repertoire includes inte percussion and dance ranging from the Georgia Sea Islands to the blue

Fri., Aug. 2 — noon to 1 p.m.



TRADITION

Vietnamese Traditional Music

The Tieng Vong Que Hu'o'ng (Echo From Motherland) ensemble led by Ngoc Dung, a former music professor in Vietnam, perform music on the *dan tranh* (zither); *dan bau* (monochord); *dan nguyet* (moon-shaped lute) and the *bo trong le* (drums).

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Explore cultural traditions from around the world. The Traditional Arts program is funded by the Paul L. & Jeanne M. ...

**LECTURES AT THE
ACADEMY OF SCIENCES**

provide members and visitors with
Academy of Sciences is proud to host two
Stern Grove Festival 1996 season.
free after general admission and are
presented by Stern Grove Festival in
California Academy of Sciences.

History

nda Way and the dancers of ODC/
ecture that includes information on
on as well as excerpts from a reper-
aking. This presentation focuses on
n epic piece that examines and ex-
men in the western United States

American Music

age Choir (CHC) brings traditional
the stage. Solidly rooted in the cul-
ed sermons, folk tales, polyrhythmic
the Gullahs of South Carolina and
of the Mississippi delta.



AL ARTS

Greek Folk Dance

Members from the various dance groups associated with the Greek Orthodox Church of the Resurrection in Castro Valley perform regional dances from Greece.

Sat., Aug. 10 — 1 p.m. (Auditorium)

The History of Street Theater

San Francisco's Earth Circus Performance Troupe presents a lecture/demonstration on the evolution of street theater from Europe to America. Highlights will include how they developed the art of stilt-walking into a dynamic new dance form as well as stories from their recent European tour.

Sat., Aug. 24 — 1 p.m. (Auditorium)

Music of Pakistan

Sharafat Ali Khan, a descendant of court musicians from the 16th century, travels from his home in Lahore, Pakistan, to perform traditional vocal music of the classical styles known as *kbayal*, *thumri* and *kafi*.

Sat., Aug. 31 — 1 p.m. (Auditorium)

and the world. Free after general admission.
Phyllis Wattis Foundation. Call 750-7165 for more information.

**1997 ACADEMY
TRAVEL PROGRAM**



*The Natural, Cultural and Ancient
Histories of China, May 3-17*

Guatemala: Heartland of the Maya

with Richard Hansen and
Deidre Kernan, Jan. 6-20

Among the Great Whales

aboard the *M.V. Sea Lion*,
with Dave White, Jan. 18-26

**The Galapagos Islands and
Andean Highlands**

aboard the *Isabella II*,
with Terry Gosliner, Feb. 21-Mar. 5

**Trinidad, Tobago and
Venezuela Land Exploration**

with Frank Almeda, Mar. 1-15

**In the Wake of Lewis and
Clarke: A Voyage Along the
Columbia and Snake Rivers**

aboard the *M.V. Sea Lion* ,
with Judy Prokupek, May 2-9

**The Natural, Cultural and
Ancient Histories of China**

with Nina Jablonski, May 3-17

**Canada's Maritime Provinces:
The Bay of Fundy and
Coastal Maine**

aboard the *M.V. Nantucket Clipper*,
with Dave Kavanaugh, Aug. 30-
Sept. 13

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MORRISON PLANETARIUM

More Weekday Shows for Summer

With hectic summer schedules, it may be hard to get all of the family together for the 2 p.m. sky show. Well, relax! The Planetarium has an extended weekday sky show schedule July 1 through Labor Day, Sept. 2, to accommodate all of your summer visits. You now can enjoy weekday shows at 11 a.m., 12:30 p.m., 2 p.m. and 3:30 p.m.

July/August Sky Shows

Sky Show/Description	Weekday	Weekend
Lair of the Bear <i>an exploration of Ursa Major</i>	2 p.m.	2 & 4 p.m.
Journey by Starlight <i>navigation by the stars</i>	3:30 p.m.	1 & 3 p.m.
StarTalk <i>a tour of the night sky</i>	12:30 p.m.	noon
Neighbors in Space <i>a family show</i>	11 a.m.	11 a.m.

Tickets can be purchased one half hour before the show at the box office once inside the Academy of Sciences (\$2.50 adults/\$1.25 youths and seniors, though some shows vary). Members must redeem their passes for tickets at the box office prior to the show. For more information, please call 750-7141.

MEMBERS MEETING



G.C. Williams

**Patagonia: The Southern
Andes of Chile & Argentina**

Patagonia is a land of contrasts and extremes. This land on the southern tip of South America is inhabited by tropical parrots and penguins, camels and condors, living in the mix of deep-blue gla-

ciers, lush temperate rain forests and harsh arid plains.

Join the Academy's Invertebrate Zoology and Geology Chair, Dr. Gary Williams, as he takes you on a virtual tour of this strange and beautiful land. Complete with vivid slides, Williams will share his knowledge on the natural history, geography, climate, culture and flora and fauna.

Williams has witnessed some of the unusual circumstances that have given Patagonia its fame. He has seen tropical birds, such as lesser rheas and austral parakeets, living in subantarctic weather conditions; small, reddish South American camels called guanacos herding in national parks; and the aftermath of a flood caused by a collapsed glacier dam.

Wed., July 10 — 2 p.m. and 7:30 p.m.

The Aurochs: Prehistoric Cattle

It may be hard for us to imagine a time when cows roamed wild, but Charles Maxwell-Smythe will take us there during a slide-illustrated lecture on the history of cattle.

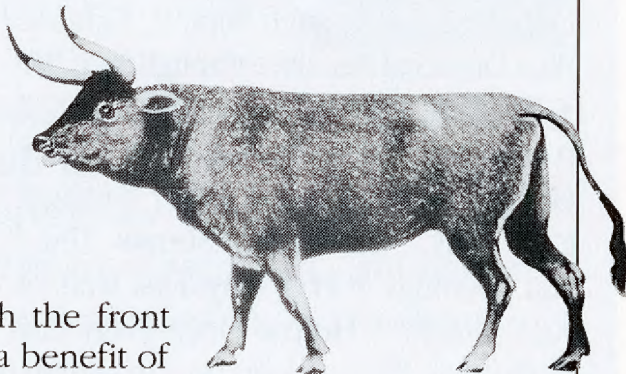
Domestic cows are descended from a single species of wild cow, *Bos primigenius*, now referred to as the aurochs, or sometimes the urus. The Asian and African aurochs disappeared thousands of years ago, but the European aurochs continued to linger in the forests of Europe.

The archeological record shows traces of domesticated cattle as long ago as 6200 B.C. Since that time, cows have become fully domesticated and are a staple of agriculture. However, a few zoos are trying to return the cow to its more wild state.

Maxwell-Smythe will clear up the mystery of the last wild cow that was believed to have died in Poland in 1627 and share with us the fascinating history of this well-known creature.

Wed., Aug. 14 — 2 p.m. and 7:30 p.m.

Please present your membership card at both the front entrance and auditorium. These programs are a benefit of membership. Members' guest passes can be purchased for \$10 each for adults and \$5 for children. Only the main entrance will be open for members' evening lectures.



JULY

SUN.	MON.	TUE.	WED.	THU.	FRI.	SAT.
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- 6

Saturday/Sunday

Stuff-A-Bear, 11 a.m. (Children's Store)

107

10

Wednesday

Patagonia, 2 p.m. & 7:30 p.m. (Members Meeting)

🐎

13

Saturday

Vietnamese Traditional Music, 1 p.m. (Traditional Arts)

🎷

20

Saturday

Flamenco Dance, 1 p.m. (Traditional Arts)

🎷

31

Wednesday

Yup'ik Eskimo Bear Symbolism, 10 a.m. (Artist-In-Residence)

🎨

AUGUST

SUN.	MON.	TUE.	WED.	THU.	FRI.	SAT.
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

2

Friday

African-American Music, noon (Stern Grove Performance)

🎷

3

Saturday

Russian Costumes, 1 p.m. (Traditional Arts)

🎷

9

Friday

Women in History, noon (Stern Grove Performance)

🎷

10

Saturday

Greek Folk Dance, 1 p.m. (Traditional Arts)

🎷

14

Wednesday

The Aurochs, 2 p.m. & 7:30 p.m. (Members Meeting)

🐎

17/18

Saturday/Sunday

Stuff-A-Bear, 11 a.m. (Children's Store)

107

24

Saturday

The History of Street Theater, 1 p.m. (Traditional Arts)

🎷

24/25

Saturday/Sunday

Debra Bedwell-Koontz from D'Bears, noon (Academy Store)

107

28

Wednesday

Hmong Textiles, 10 a.m. demonstration (Artist-In-Residence)

🎨

31

Saturday

Music of Pakistan, 1 p.m. (Traditional Arts)

🎷

FUTURE DATES TO REMEMBER

Sept. 11, China, with Nina Jablonski (Members Meeting); **Sept. 20,** One River, with Wade Davis (Special Lectures); **Sept. 26,** The Farallon Islands, with Peter White (Special Lectures); **Oct. 9,** Central Asian Pamir Mountains, with Stephen F. Cunha (Members Meeting)

VISITOR INFORMATION

Special Exhibitions: "Bears: Imagination and Reality," through Sept. 2; "Lu Huan: Stone Carvings by a Chinese Master," through Sept. 8; "Around the World in Eighty Years," through Sept. 2, Cullinan Blue Diamond Necklace through Sept. 30.

• **Feeding Times:** Fish Roundabout, 2 p.m.; Penguins, 11:30 a.m. & 4 p.m. • **Guided Tours:** Free one-hour highlight tours daily. • **Laserium Shows:** Thu.–Sun. evenings. • **Free Day:** First Wed. of each month. • **Hours:** Open every day of the year. Winter hours 10 a.m.–5 p.m. Summer hours (Memorial Day weekend to Labor Day) 9 a.m.–6 p.m. **Information:** Hotline (415) 750-7145, world wide web <http://www.calacademy.org>

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<input type="radio"/> \$45 Individual <input type="radio"/> \$60 Family/Grandparent <input type="radio"/> \$40 Dual Senior <input type="radio"/> \$35 Senior/Out-of-Towner (zips 900–935 or outside of California only) <input type="radio"/> \$125 Curator's Circle	Science Under the Sea Aug. 16 or Aug. 19	_____ x \$ 25 _____ x \$ 25	= _____ = _____
	Working With Wildlife July 27–28	_____ x \$ 60	= _____
	TOTAL		= _____
	DONATIONS		
	<input type="radio"/> I would like to support the Academy of Sciences with a donation. \$ _____		
	TOTAL PAYMENT ENCLOSED		\$ _____

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Daytime Phone _____

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Academy of Sciences Keeps Full Dance Card Thunder Ball Party to Arrive by Storm

Trustee Dr. Russell Woo and Mrs. Woo get into the spirit of "Enchanted Pacific" as a Chinese dragon greets visitors.

In spring, the Academy of Sciences was the place to see and to be seen, both on the social scene and behind the scenes. The Academy Ball "Enchanted Pacific" was a fantastic formal fund-raiser; supporters met scientists at Curators' Forum to learn what's new in the Academy's collections

and labs; and members met the researchers, collection managers and educators at Open House.

Make your reservations now for the next big Academy of Sciences event! The third annual Academy Gala, "Thunder Ball," will roll over the museum like a summer storm on **July 13**. Take cover with us for this event of atmospheric proportions to benefit science education programs at the Academy. Tickets are \$75 per person, or \$70 per person if purchasing four or more tickets. To receive an invitation, call the Special Events department at 750-7219.

Ichthyology Research Associate Dr. Douglas Long discusses the venomous stonefish with Terry Jefferson, Kevin Gamp and Nicholas Navarro at Members Open House on April 30.

KPIX-TV News Anchor and Academy Ball Chair Kate Kelly, Sandy Cedarwall and Trustee Shaun Byers get into the spirit of "Enchanted Pacific."

Director of Research Dr. Patrick Kociolek discusses diatom biology with William Fries II at Curators' Forum on April 18.

Photos: Dong Lin

Fabulous Gems at the Academy

Now until Sept. 30, the famous Cullinan Blue Diamond Necklace will be on display in the Gem Room. The necklace features an extraordinary 2.6 carat blue diamond oval in an Edwardian setting.

This striking necklace was previously on display next to the Hope Diamond at the Smithsonian Institution. It's appearance at the Academy of Sciences marks the only other public exhibition in the United States. It was presented by the S.H. Silver Company Estate & Fine Jewelry Salon.

Worn only six times in its entire history, the precious, bow-motif necklace features approximately 25 carats of white diamonds and 5.57 carats of blue diamonds, including the 2.60-carat Cullinan Blue Diamond. The nine blue diamonds featured in the necklace symbolize the nine major stones cut from the immense, rough, 3,106-carat Cullinan Diamond, which was discovered by Sir Thomas Cullinan and presented to England's King Edward.

Academy Offers Free Shuttle Service

Avoid weekend parking hassles by taking a free, weekend shuttle from the UCSF parking garage to the Music Concourse, in front of the Academy. On Saturdays and Sundays throughout the summer, a shuttle runs from the UCSF parking garage every 10 minutes from 9:30 a.m. until 6:15 p.m. All-day parking is available in the garage for \$3, but the shuttle is free. The parking garage is at Irving Street at 2nd Avenue. The shuttle is a joint effort between the Academy of Sciences, the de Young Museum and the Asian Art Museum to help alleviate traffic and parking congestion.

WHOTO CALL ☎ Academy Info., 750-7145 • Academy Store, 750-7410 • Admissions, 750-7159 • Aquarium, 750-7247 • Biodiversity Center, 750-7361 • Development Office, 750-7216 • Docent Tours, 750-7155 • Education Office, 750-7100 • Group Information, 750-7159 • Job Hotline, 750-7333 • Laserium, 750-7138 • Lectures, 750-7128 • Library, 750-7102 • Membership Office, 750-7111 • Planetarium, 750-7141 • Planned Giving, 750-7216 • Receptionist, 221-5100 • Security, 750-7000 • Travel, 750-7348 • Volunteer Services, 750-7154 • Weekend Information, 750-7375

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